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TAXATION AS A PARTIAL SUBSTITUTE FOR BORROWING TO COVER THE COST OF PER- MANENT MUNICIPAL IMPROVEMENTS.¹

BY PROFESSOR E. DANA DURAND.

The rapid increase of municipal debt has often been a source of apprehension to city-dwellers and to thinkers interested in the welfare of cities. It has been said that a large proportion of such indebtedness, especially in our American cities, has been due to extravagance and corruption, to the accumulation of floating debts until their funding became necessary, to borrowing for nominally permanent investments which should properly have been considered current expenditures. By these means, it is urged, the present generation squanders the city's patrimony. It is considerations of this nature that have led to the enactment, in a large proportion of our states, of constitutional and legislative limitations on the power of cities to incur debt.

Most publicists and students of finance, however, believe that there is properly a wide field for municipal borrowing. They tell us that it is not the use but the abuse of debts that is to be condemned. The rapid growth of cities, the increasing dependence of the individual upon his fellows as population becomes more dense, the constantly rising standards of wants among the citizens, and the immense improvements constantly being made in the mechanical means of satisfying these wants, have demanded and are demanding a sudden and great development of relatively permanent public works

¹ Some modifications have been made in this paper since it was read, on the basis of suggestions by Professor John C. Schwab and Professor H. H. Powers, which the writer gratefully acknowledges.

involving heavy expenditure. Granted that such expenditure is to be made, most writers on finance hold not merely that it may wisely but that it must properly be met by the creation of debt. Thus Professor Adams points out that the engineering interest, requiring that such works be promptly executed, and the financial interest, forbidding sudden excessive increases in taxation, demand resort to borrowing in such cases. He suggests that the duration of the debt should be regulated in part by the probable length of time before the work or improvement for which it was incurred will need to be replaced; and thinks it would be legitimate enough, under certain circumstances, that the bonds for a park should be of perpetual duration, the interest being considered in the light of an annual rental for a permanent privilege.¹ The same and other writers add that the greater certainty with which estimates of future revenues and expenditures may be made in the city, as compared with the state, especially justifies a wide use of municipal credit. Particular stress is laid on the desirability of meeting by means of bond issues the cost of undertakings of a *quasi*-private nature, which can be made to earn a revenue to cover their own debt charges.

To these general principles concerning municipal debt most of us will give ready assent. But it may not be superfluous to remind ourselves also how wide may be the application, in a huge and growing metropolis, of another tenet which financial writers have laid down with emphasis on its significance in national rather than in local financiering. Thus Wagner,² among others, points out that the capital investments of nations, at least the smaller investments, such as those for new

¹ Adams, "Public Debts," 314, 315.

² Wagner, "Finanzwissenschaft," I, 166.

buildings, often tend to become quite uniform in amount from year to year. Whereas similar investments by small local governments would be rare and properly made out of borrowed money, for the larger financial economy they are often essentially recurrent and should be paid for by ordinary revenue. In accordance with this principle we find that our own federal government, for example, rightly meets out of current income practically the entire cost of new public buildings, fortifications, war-ships and similar constructions of a relatively enduring character.

We are apt to overlook the fact that our great cities are coming to resemble national governments not a little in the magnitude and variety of their enterprises. The full importance of the principle we have just mentioned in its bearing on municipal finance is scarcely appreciated in most quarters. Attention has, to be sure, been frequently enough called to the fact that, with the rapid growth of our cities, expenditures for certain kinds of public works tend to recur with approximate uniformity, even though each particular piece of work done may be in a sense a permanent improvement. However much the practice of some cities may violate the rule, it is fairly well understood on all hands that such expenditures as these ought to be covered by taxation, not by borrowing. But when works of this sort are spoken of, those usually in mind are practically limited to two classes—street improvements and minor public buildings, such as school-houses, etc., which must be extended steadily with the growth of the city in territory and population.

It is a less familiar thought that in a very populous and growing city, the expenditures for much larger and more general enterprises of a permanent nature also

tend toward a certain degree of regularity. The influences to which we have already alluded as partly justifying the present large indebtedness of cities conspire to make constantly recurring demands for new bond issues. Concrete illustrations will make the effect of these influences more apparent.

It has often been the experience of great cities that a water system deemed sufficient for a century has been comparatively soon outgrown by the extension of the city, and by the demand for increased consumption *per capita*. The old plant must be continually enlarged; there must be new pipes, new pumps, new reservoirs at the source of supply, and in or near the city itself. At the same time the rising standard of public opinion regarding the sanitary character of water, or perhaps the increased pollution of the water from the growth of the city itself, or of other places, requires new outlay for purification processes. These same circumstances are likely sooner or later to drive the city to add to or replace its existing water system by another having an entirely new source of supply. The expenditure for this new enterprise will often be made, not in that sudden fashion with which we sometimes think of public works as leaping into life, but by instalments covering quite a series of years, during which the city contents itself with the old supply, or with the gradual introduction of the new. Putting all such expenditures as these together, there is apt to be found a rough regularity in outlay, if not from year to year at least from one period of a few years to the next.

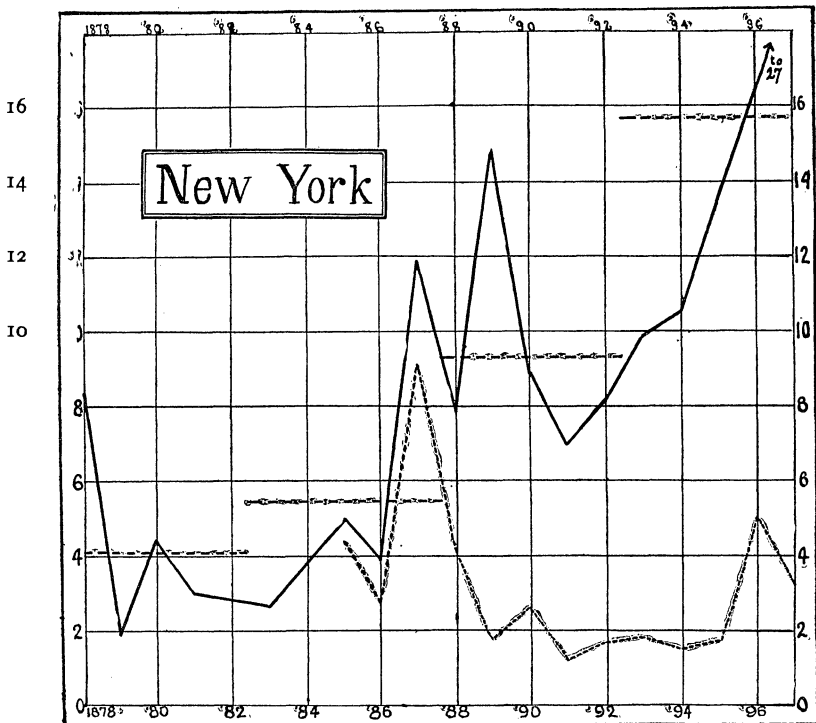
A similar experience is met by the great city with its public parks, squares and boulevards. Growth of population, and increased desire for recreation and air for all classes of citizens, call for the opening of new spaces, in

the outskirts of the city and in the crowded old sections as well. Existing parks must, in the meantime, be improved and beautified. There is thus almost constant demand for new capital investment. It could readily be pointed out how the same general condition of affairs would be apt to manifest itself regarding bridges, sewers, public buildings, gas works, and other enterprises.

If now in regard to any one class of public works the great modern municipality often finds necessities for new expenditures arising in a somewhat uniformly recurrent manner, it is self-evident that outlay for all of the different classes of works taken together will be likely to approximate still more toward regularity in amount. The fluctuations in expenditures for different purposes tend to offset one another. Moreover, even if unusually large expenditures are called for in some one or two years, they will probably be counterbalanced by lower expenditures in the immediately following years, so that by taking short groups of years as our units the regularity in outlay becomes much more marked. Of course, this tendency is only a tendency; the regularity in any case is only a rough one. It may happen, as we shall point out more fully later on, that peculiar circumstances may cause the needs for new permanent improvements to stand for a considerable period far above the average. But ordinarily such needs themselves tend to arise successively, rather than concurrently. Moreover, the capacity of city officers to give thought and effort to great undertakings is limited, so that they feel less disposed to take up several enterprises at one time. The people, too, even where the money for such works is entirely borrowed, are usually too jealous of expenditure to permit the outlay for new improvements to remain for any number of years very greatly above the average

to which they have been previously wonted. Considerable variations in the amount invested in different years or groups of years are, of course, to be expected, and occasionally large variations, but, broadly speaking, there is a distinct tendency toward recurrence and regularity.

The point we have been developing from general considerations may now be illustrated by the statistics of



Vertical scale reads in millions of dollars.

the amount of bonds issued annually by various great cities. We may premise that the probabilities are that bond issues themselves fluctuate somewhat more from

year to year than the actual expenditures of money on works paid for by borrowed funds.

Referring to the diagram showing the yearly issues of bonds by New York City from 1878 to 1897,¹ a first glance at the sharp upward and downward movements of the curve seems to show quite the opposite of a tendency toward uniformity. But each angle represents a single year only, and where we group years by twos, threes or fives, we discover a much greater regularity in outlay. Thus the very large borrowings of 1887 and 1889 are offset in part by small loans in the preceding, intervening and following years. By taking the average for groups of five years, as shown in the broken lines, we see quite a steady geometric rate of increase in the amounts borrowed. In only one year, 1879, have bond issues amounted to less than two millions, while since 1887 they have never fallen below seven millions.

The most satisfactory method of judging the degree of uniformity in the bond issues from year to year is, perhaps, by calculating the percentage of variation from the five-year averages, that is, the percentage by which the sum borrowed each year stands above or below the average for the group of years in which it belongs. It will be found that in nine out of the twenty years the variation from these averages in New York has been less than 25 per cent., and in fourteen less than 50 per cent. The average of all the percentages of variation is 36.4 per cent. The largest excesses above the average are respectively 118 per cent. and 105 per cent.; the largest

¹Compiled from figures in Durand, "Finances of New York City," p. 320, and in "Annual Report of the Comptroller of the City of New York," 1897, Statement B, II. Here and in the figures for the other cities refunding and temporary bonds have been omitted where separable.

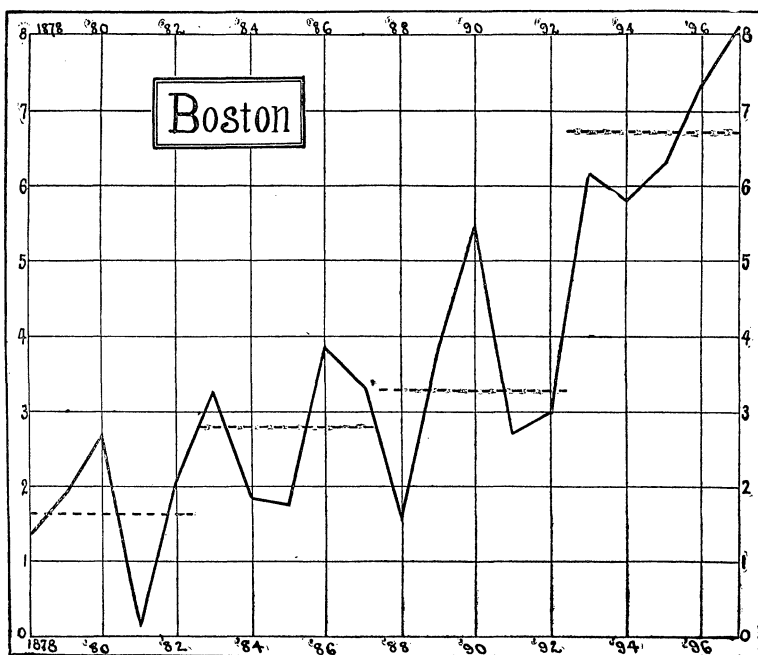
variations below the average are 55 per cent. and 51 per cent.

The point that a rough sort of regularity may attend the capital expenditures for even a single form of enterprise is illustrated by the annual bond issues of New York for water supply since 1885,¹ indicated by the dotted line. The second great Croton Aqueduct was begun in that year, and, although the expenditure was greatest during the first few years after its inception, water was not actually brought to the city through the new conduit for nearly a decade. Meantime and since continual expenditure has been necessary for impounding more water, protecting its purity, and for other purposes. The bonds issued for water purposes have in no year fallen below one million dollars, and have usually ranged more nearly two millions. The Greater City is already considering the necessity of further water supply for the borough of Brooklyn.

It may be said that New York is so much larger than most even of our great cities as not to be fairly typical of their financial conditions. Unfortunately, data are not at hand to trace the annual bond issues of any considerable number of cities. Even were this possible, however, many American municipalities would be far from showing in their borrowing a normal course of development. Constitutional limitations, popular distrust of rulers, short-sighted policy in neglecting needed public works or leaving them to private enterprise, have kept many of them from spending what a progressive city should for permanent improvements. This is, in part, the explanation of the small indebtedness of Chicago and San Francisco, and of the slight new loans which

¹ Compiled from Comptroller's Report, 1893 and 1897, Statement B, II.

St. Louis and Philadelphia have incurred during the past fifteen or twenty years; although to some degree these cities have resorted to taxation to pay for public works. More typical, I think, of our cities of the second class, are Boston and Baltimore, both of which make free—often, doubtless, even from the standpoint of the ordinary financier, too free—use of their credit.



Vertical scale reads in millions of dollars.

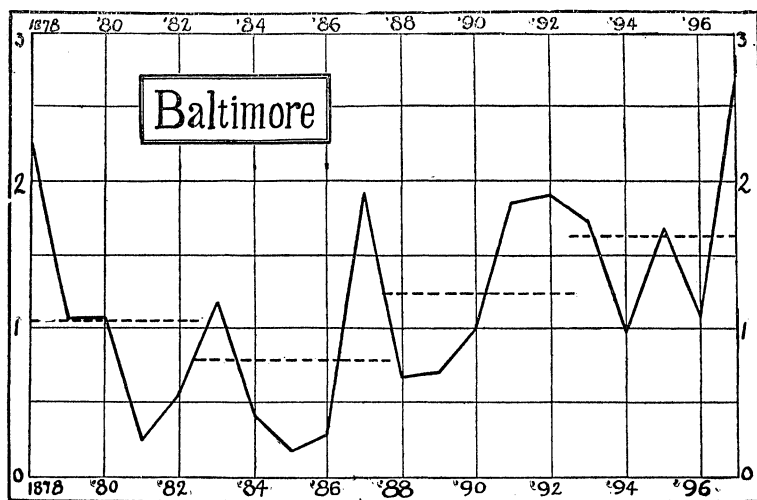
The line showing the amounts borrowed by Boston for the years 1878–1897,¹ fluctuates somewhat less than in the case of New York. Taking the average for five-year periods, we find an arithmetical rather than a geometrical increase, except for the last period, when

¹ Boston, "Report of the City Auditor," 1896–97, p. 211.

several well-known great enterprises, undertaken simultaneously, have caused exceedingly large bond issues. Since 1884, the bonds issued have in no one year fallen below \$1,500,000.

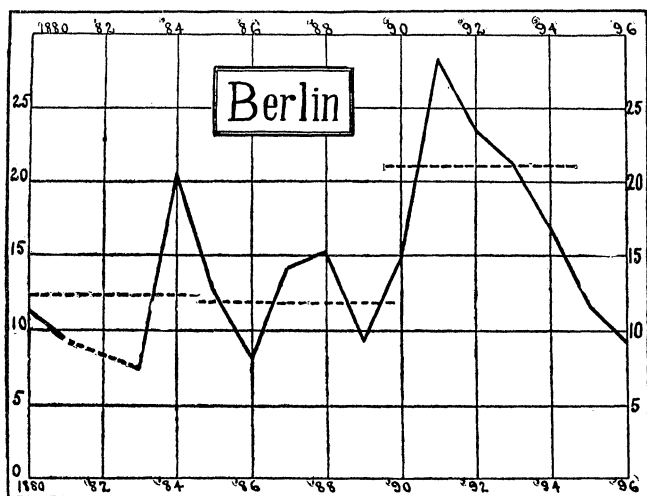
The debt created during twelve of the twenty years has varied in amount from the five-year average by less than 25 per cent., and in sixteen years by less than 50 per cent., the average of all the variations being 29.2 per cent. The highest percentage above the average is 66.1 per cent., the two lowest respectively 92.4 per cent. and 53.5 per cent.

Although the figures for the annual loans of Boston for any one specific purpose are not available for any considerable number of years, the statistics showing the amounts expended for water supply from year to year, including both current and capital outlay, together with those of the gross water debt, seem to indicate that, like New York, Boston has found needs for new investments in its water system recurring with a certain degree of uniformity.



Vertical scale reads in millions of dollars.

The diagram showing the yearly borrowings of Baltimore¹ presents slightly greater fluctuations than in the case of New York or Boston, the minima during all but one of the years from 1881 to 1886 being especially noticeable. Nevertheless, the regularity is sufficient to strengthen our general impression concerning the tendency existing in great cities.



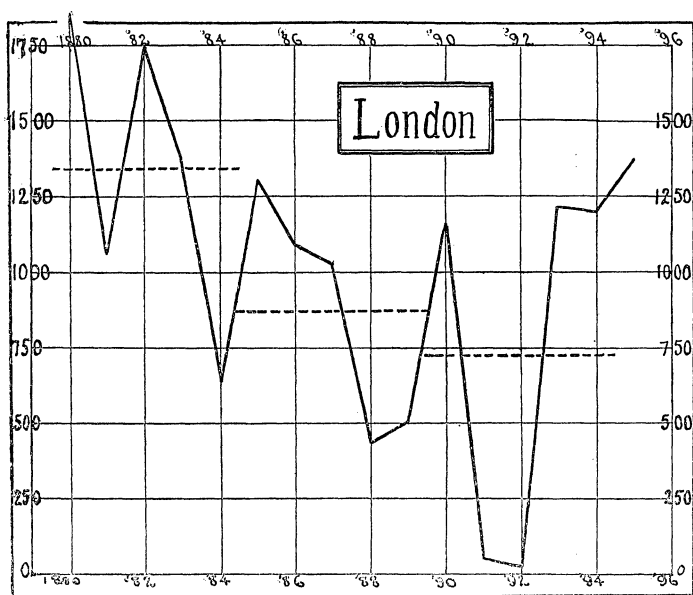
Vertical scale reads in millions of marks.

It will be profitable to inquire whether a similar tendency is shown in the sums borrowed by leading European municipalities. Berlin is, perhaps, the best type of the well managed, progressive foreign town. The diagram illustrating her annual expenditures out of borrowed funds shows movements from year to year rather less sharp than even those of Boston.² In nine out of the

¹Compiled from Hollander's "Financial History of Baltimore," pp. 385, 386. The average variation of the annual bond issues from the averages for five-year periods is 49.2 per cent.

²Compiled from the annual "Verwaltungsbericht des Magistrats der Stadt Berlin" from year to year.

fifteen years from 1880 to 1894 inclusive, the capital expenditures vary less than 25 per cent. above or below the average for the five-year period in which they stand, and in fourteen less than 50 per cent. from the average. The average of all the percentages of variation is 22.7. Nevertheless Berlin, like other cities, has had her periods of unusual expenditure. The outlay for the five years from 1890 to 1894 stands very considerably above that before.



Vertical scale reads in hundred-thousand pounds sterling.

The diagram showing the amount of debt created annually by the city of London is based only on the figures for the Metropolitan Board of Works and its successor, the County Council.² The sphere of activity

² "House of Commons Papers, Local Taxation Returns," Summary, 1887, p. xxv, 1897, p. xl.

of these bodies being much more restricted than that of the ordinary city government, we should expect, on the whole, less regularity in expenditure for permanent improvements. Aside from the minima between 1888 and 1892, however, which are perhaps explainable by the transition from the Board of Works to the County Council, there has been a clearly marked tendency toward uniformity in annual borrowings. The average percentage of variation from the five-year averages between 1880 and 1894 was 47.5 per cent.

Both New York and Boston illustrate admirably how numerous are the items of expenditure for permanent improvements which large cities are called upon to make. The comptroller's report of the former city shows no less than 66 separate classes of bonds issued during 1897.¹ Money was borrowed for nearly 20 public buildings of various sorts, aside from numerous school-houses, for almost as many different park and parkway extensions and improvements, and for a large number of street and boulevard enterprises. In Boston for the same year more than 130 different objects are enumerated for which bonds were issued, the items for construction and improvement of buildings and of streets being specially numerous.² Of course in both these cities this large number of items is partly explained by a violation on the part of the municipal authorities of the financial canon which prohibits borrowing for essentially current outlay, but after all a very considerable proportion of these many objects of expenditure come pretty strictly under the head of permanent improvements in the sense in which most financial writers and public officials use the term.

¹ New York Comptroller's Report, 1897, Statement B, II.

² Boston Auditor's Report, 1897, pp. 169-172.

It will still be urged, however, that, even though such figures as these presented may point toward a rough regularity in the bond issues of great cities during the past twenty years, yet the capital outlay of these years has been abnormally high; that sooner or later in the future most of our municipalities will find the demands for permanent improvements decreasing, if not absolutely, at least relatively to population and especially to wealth. If this shall prove true, it is obviously just that the taxpayers of the years to come should share in the cost of works now being erected, of whose advantages they are to partake.

It is rash to prophesy, but there seems at least a probability that, with certain exceptions, of course, the expenditures of great cities, both for current administration and for enduring works, will not materially decrease for a long time to come, as compared with either population or taxpaying ability. All the influences which have tended in the past to increase the relative needs of cities seem likely to persist in the future.

The increase in city population, at least in the United States, bids fair to continue with a rapidity almost if not quite equal to that of the past fifty years. Prospective increase of population is not ordinarily, as is sometimes supposed, a justification for borrowing in the case of a city already large. Generally speaking, municipal growth increases municipal needs in more than equal proportion. In the first place, it requires a widening of the scope of governmental action. The greater territorial extent of the city, and still more the greater density of its population, makes the citizen less able to satisfy his own wants, more dependent on others. For this reason forms of enterprise which at one time

belong legitimately to private initiative may, a decade or a quarter-century later, be so indispensable to all classes of city-dwellers that public ownership is the only safeguard against oppression. Whatever be the strength of the arguments for municipal ownership of so-called "public utilities" to-day, it will be twice as great twenty years hence. And whatever be their strength now or then, the actual tendency of our municipalities to take a larger and ever larger share in such enterprises is apparent. We have reason to believe that the now common practice of cities in Great Britain and Germany of owning docks, gas, electric and street railway systems, etc., will be increasingly followed in this country; and if so, the constant development demanded in these facilities will call for frequent new capital investments.

Moreover, added population in itself often calls for more than proportionately greater quantity and higher quality of services along lines already universally recognized as within the domain of governmental activity. For instance, streets must be widened to accommodate the growing traffic, and to increase the supply of light and air made specially necessary by the added height of buildings. The expense of such changes in old established streets is enormous. Again, owing to the danger to health from dense aggregation, sewers, parks, sanitary enterprises of all sorts, constantly demand extension and improvement, simply to maintain the existing standard of health without attempting to raise it.

But more important, perhaps, than mere increase of population in calling for new and improved municipal services, are the constantly rising standards of civilization, the steadily widening knowledge and desires of the people, and the ever increasing spirit of solidarity among

them. Rapid as has been the progress in these directions in the past century, we have no reason to believe that the movements of the coming century will be with slower pace. Prophets of the earlier days have seldom overestimated the rapidity of economic and social advance. Already we hear on every hand suggestions of new and wide-reaching municipal enterprises for the public welfare—for transforming the slums, for increasing the convenience, comfort and health of all classes, for educating them in a score of different ways. Without sharing in any manner the Utopian visions of a Bellamy, may we not conservatively enough look forward to a time when city life shall be made far more healthful, convenient and delightful than it is to-day, and that, in no small degree, through the efforts of public authorities, through the action of the great co-operative household of citizens?

If such shall prove the case, this increased activity will require increased outlay, for enduring public works, as well as for current purposes. Each year, each quinquennial period, each decade, each generation, will enjoy the benefit of the works established by its predecessor, but each will, at the same time, have new investments to make to meet its own needs and to hand down to its successor.

If there is any weight in the considerations so far presented, it is scarcely necessary to urge that sound financial policy requires that our great cities pay out of current revenue a much larger proportion of their expenditure for permanent improvements than most of them have been doing. We need, in fact, to ask indulgence for further emphasizing this point.

Borrowing on such a scale as has been common is unjust to future taxpayers. Sometime the reckoning must

come. It will not be possible always to shove before us a continually increasing burden—and that is practically what we are doing, even though we pay all past debts when they become due, if at the same time new debts of larger amount are constantly being incurred. If the likelihood is that each new generation will have new burdens of its own, relatively fully as heavy as those of its predecessor, it should not be asked to bear, not a small part merely, but the greater portion of the cost of previous undertakings.

It goes without saying, moreover, that unnecessary postponement of financial burdens adds to their weight. Interest goes on ceaselessly. If a public improvement be paid for by thirty-year bonds at the lowest rate of interest, 3 per cent., and if these bonds be gradually amortized from the beginning so that the average duration of the debt is only fifteen years, yet the actual total outlay for the improvement is increased almost one-half through interest. In private life the man who borrows largely, or for long periods, for non-profit making expenditures, is considered a spendthrift. Besides, the burden of interest is an immediate one—that at least cannot be shouldered upon the future. New York City in 1897 paid nearly eight and one-half millions for interest on its bonds, and almost as much more was added to the sinking fund for the ultimate redemption of the debt, these two sums together constituting over one-fourth of the total city expenditures.¹ The money spent for these purposes during the years 1892 to 1897 was not far from equalling the new debt incurred in that period of great borrowing. To be continually paying

¹Compiled from Comptroller's "Report," 1897, p. 44 and Statement G. The net amount of contributions to the sinking fund from all sources is considered as a current payment. This amount varies considerably from year to year.

interest and redeeming old debt with the one hand and continually incurring new debt with the other is poor economy. Indeed, it is a fiction to speak of borrowing as transferring the burden of expenditure largely to the next generation. The taxpayers of to-day will most of them be paying taxes for ten, for twenty years to come, and their taxes will largely go to cover interest on bonds which might have been saved by taxing themselves a little more heavily at the outset.

It has been intimated already that financial writers urge especially the desirability of borrowing to meet the cost of profit-earning enterprises. It may, indeed, readily happen that, when entering upon some great new *quasi-private* undertaking, the city may make an unusually sudden and large capital outlay, clearly calling for bond issues; but where expenditures for such purposes are distributed more or less evenly, there seems no sufficient reason for making a distinction in principle regarding them.

In the first place, the mere object of insuring that such an investment be made to support itself by the sales of its product or service can be almost if not quite as well accomplished by careful book-keeping and public reports as by the segregation of debt charges and revenues. As a matter of fact, the attempt to keep up numerous separate funds of different kinds in our American cities has usually confused rather than aided the taxpayer, and has often broken down. In the second place, the mere fact that the revenues of an enterprise are capable of covering the debt charges is in itself no argument against cash payment for the investment. Receipts in that case will go to reduce taxation—not in the distant future but in the present. A man who has all the capital of his own which he can profitably invest in a revenue-earning

business would be foolish to borrow. It is surely better to have the investment free of burden. Finally, it is to be remembered that a city is justified in furnishing any service only in case it is of exceedingly general usefulness—*quasi*-public in its character. As the city grows and as solidarity of interests and of sentiments increases, more and more will the service tend to become of universal necessity, will the private interest yield to the public interest, and the price and fee principles of payment to the tax principles; less and less will it be fitting to rely upon charges to consumers as the means for paying interest and redeeming the debt incurred in the enterprise.

For the sake of simplicity we have in the preceding discussion passed over with mere casual mention some important modifications in the statements and principles laid down. These must now be more fully developed.

We noticed, in the first place, that, even where the capital expenditures of a city become quite uniform if groups of several years be taken as the units of comparison, there are often sharp fluctuations within these groups. Though it would be possible, often, by taking thought, to decrease these fluctuations somewhat, engineering and other reasons are bound always to cause them to a considerable degree. Such reasons may easily call for two or three times as large payments in one year as in the next. So far as this is true, we must evidently depart from any policy of immediate and full cash payment. The tax-rate cannot be permitted to vary with such suddenness.

Again, we saw that it has happened, even in those cities where the uniformity of capital expenditure has been generally most marked, that during certain periods of years the outlay for permanent improvements has

been materially higher *per capita* than the average for preceding and following periods. Such unusually large expenditures may have been entirely desirable and necessary. There can be little doubt that some of our own great cities are at the present time having to spend more for public works, relatively to population and taxable valuation, than they are likely to need to do during most future periods. Thus in New York the attempt to remedy the neglect of public improvements on the part of a corrupt administration during a long series of years, together with the impetus of a new conception of the possibilities of municipal life and with the new needs growing out of the consolidation of the city, has led to unprecedented capital outlay during the past five or ten years, an outlay likely to continue large for several years to come. So too, Boston, during the past decade, has been growing into closer relation with its suburbs, has been coming to realize its metropolitan character, and has caught a new spirit of progress—influences which have resulted in the undertaking of extensive improvements, scarcely likely to be equalled in relative importance in the municipal annals of some time to come. Both of these cities have, therefore, been justified in borrowing part, though not the whole, of the money necessary to meet these expenditures.

Such periods of unusually active municipal development, of especially heavy outlay, are likely hereafter to occur from time to time in almost every city. What constitutes a period of truly extraordinary expenditure, and what proportion of its burdens may properly be postponed to the future, are questions which cannot, of course, be determined in advance with absolute certainty. The decision as to a course of action which, so far as can be foreseen, is wise and just, calls evidently

for most careful, conscientious and statesmanlike deliberation.

We must, finally, recognize that the existing charges on debts earlier incurred preclude the immediate full adoption of a policy of paying for permanent improvements primarily out of current revenue. To do so would be, not to equalize the burdens of present and future generations, which is the goal to be sought, but to call for double sacrifice from the taxpayers of to-day. The city would evidently have to begin by meeting part only of its capital expenditure by means of regular income, increasing the proportion gradually as the payments on past indebtedness relatively diminished.

In view of the preceding general argument and of its qualifications, the following may perhaps be tentatively outlined as a feasible scheme of payment for permanent municipal improvements in great cities. It is not presumed to be applicable in any considerable degree to small places.

Supposing that the burden of earlier debts has been reduced to a moderate basis, there might be fixed in advance, for a period of say five years, an annual sum to be raised by taxation for the purpose of establishing, extending and rebuilding works of a permanent character. This sum would be determined by a careful consideration of past, present, and probable future circumstances, expenditures and needs regarding such public works. A fair basis often would be the average outlay for permanent investments during the preceding five or the preceding ten years, with a percentage added to cover increase of population; but regard would have to be given to the question whether the outlay for these years had been apparently normal or otherwise. It would not necessarily, of course, be the purpose to raise

the full amount of anticipated expenditures for permanent improvements, if it were fairly believed that such expenditures would be greater than the average. But it would be necessary to guard against the constant temptation to lighten present taxes, especially for the sake of political capital, at the expense of the future. Public officials are apt to be too ready to overestimate the relative weight of present burdens and the relative capacity of the future for burden-bearing.

All money thus raised by taxation would be set aside exclusively for permanent improvements, and not allowed to be used for ordinary administrative purposes. Whenever there was a surplus of income from this source over expenditure, it would be deposited in bank at interest; whenever there was a deficit, money would be borrowed on short-time bonds, to be renewed when necessary. In this way minor fluctuations in the expenditures from year to year would be adjusted. This double method has already been systematically worked out in some of our great cities, for the purpose of establishing an equilibrium between income and outgo within the year itself, and it is also employed in the national finances of certain countries. New York City, for example, borrows immense sums each year on so-called "revenue bonds," which are mostly repaid within a few months out of taxes, small balances being occasionally carried over to another year. The rates of interest necessary to secure such short-term loans are remarkably low, while, on the other hand, by careful and honest management, a reasonable interest can usually be obtained from banks on money held by the city in advance of expenditure.

Finally, if at the end of the period of years any large amount of these short-time obligations remained out-

standing, representing capital expenditures in excess of the total raised by tax, they would be funded by other bonds, having a term of greater or less length, according to the character of the improvements made during the period and the probabilities as to future capital outlay—the matter again calling for careful and conscientious deliberation. Under present conditions, I may add, it does not appear that much attention should be paid, in fixing the duration of bonds, to the preference of investors for long-time securities. The slightly lower rate of interest on a thirty or fifty-year bond is not worth securing at the cost of paying interest twice as long as is necessary or proper, in view of the nature of the investment.

The chief practical difficulty which might arise in the operation of such a system as here proposed, would be the temptation, growing alike out of the dishonesty of officials and the lack of foresight on their part and that of the people as well, to spend wastefully or prematurely any money which might be accumulated in the fund for permanent improvements. Simply because the money was there, the city might be inclined to undertake comparatively unnecessary works, leaving little or nothing to meet more pressing needs which might arise later. But in a municipality with even a moderately intelligent and honest government, there ought to be far less difficulty from this source than was experienced by our national government during the time when its finances showed a constant surplus. In the city, surpluses would not occur repeatedly, year after year, with prospect of indefinite continuance in the future. It would be understood, by people and officials, that a distinct destination was already in view for moneys ac-

cumulated. In fact, were our cities governed by fairly competent and fairly permanent rulers, it would be possible for them to estimate quite definitely in advance the needs of each period of years as a whole, and to know approximately the sums which would be required for the leading improvements contemplated. Such a condition as this has already been reached in Berlin and other European cities where municipal administration has been reduced to a profession.

Professor HOLLANDER : As a statement of fiscal theory there would be little dissent. Yet when we come to make practical application of the theory, a necessary exception becomes so formidable as to question the utility of the theory. In other words, what is to be said in the case of a city groaning under an oppressive tax rate, with an assessed valuation of property to its full value, and yet in urgent need of improvements, such as school buildings, fire departments, street paving, which, from a strictly theoretical point of view, are chargeable to current income. That is the typical condition of the American city, and it seems so conspicuous that it is idle to formulate a fiscal theory in opposition to it, or to say that the cities shall halt in improvements or in the amelioration of the conditions of municipal life, on the score that they should not borrow.

There are at least three circumstances which render increase of municipal indebtedness for necessary municipal improvements less ominous than might be supposed. In the first place we must consider the likelihood of continuous decline in the interest rate of municipal securities. In the second place we can assume in the ordinary city a saner policy of amortization, etc. Finally, a consideration to be borne in mind, most important of all, is

the fact that municipal tax-paying capacity may increase more than proportionally with municipal expenditures.

We should bear in mind the danger of borrowing for current improvements, but we must not formulate an absolute rule to the contrary. The policy should be one of discretion. Borrowing is to be permitted when the need is urgent; it is not to be condemned merely on the ground that it violates the principle of "pay as you go".

Professor SELIGMAN: After listening to the last speaker's remarks, it occurs to me that it would be unfortunate if we were compelled to come to the conclusion that the theory advanced by the essayist was in itself admirable but could not be worked out in practice. That, of course, is a statement to which teachers of economics have grown accustomed. But if a theory is true, it is safe to assume that it can be worked out.

Is there not some way in which we can find a common ground? The one speaker said, we must pay for new expenditures through more taxation. The other speaker said, the theory is beautiful, but you cannot do it because the burden of taxation is already too great. If the theory is true that we ought to pay for those expenses out of current revenues, and if our revenues are insufficient, the thing to do is to reform our methods of revenue. The whole question of municipal income itself is bound up with this question. The practical aim must be to reform our present system of taxation. Then we shall have a revenue adequate to the realization of the theory.

Again, it may be asked: how far are we to accept the demand of Professor Durand on the one hand, and on the other the contention of the last speaker that we should employ this method with discretion? If we accept the principle that there are continually recurring

improvements and that there will be from year to year new schemes of permanent improvement, could not a correct line of distinction be drawn between the inauguration of the new idea and its continuance? The inception expenses could be met by borrowing money ; but then, after the public had become familiarized with the idea of and the need for each new improvement, could not the recurring expenses incident to such improvements be met by taxation? In brief, start the improvements by borrowing money, but provide for the continuance of the expenditure by taxation.